

What is claimed:

Claims (cancelled) 1 to 4, 6 to 17, 19 to 25, 27 to 37, 40 and 42

5 Claim ~~51~~. (currently amended) ~~The multi-point seat belt to protect the passenger from~~  
~~submarining according to claim 1, further comprising an anti-submarining latch plate (11, 25)~~  
~~movable along the lap belt portion (1.3)~~ An anti-submarining seat-belt assembly for increasing  
survival chance of a passenger of a transport system in an accident or during in-flight  
turbulence, comprising  
10 a seat belt, consisting of at least one shoulder belt portion, a lap belt portion and an  
extending belt portion (1.1 to 1.4);  
a main buckle assembly (9.1), having a master release button (84) seat frame (3.3, 3.3a to  
3.3d) and arranged to attached to the floor (6) a stiff first transport-system member,  
generally representing a floor of the transport system adjacent to a first seat-side or a seat-  
cushion frame at the first seat-side or a mid-tunnel of a motor vehicle adjacent to the first  
15 seat-side;  
a lower belt deflector (17) which, attached to a stiff second transport-system member, which,  
generally representing the floor of the transport system adjacent to a second seat-side or  
the seat-cushion frame at the second seat-side or the a post section of the motor vehicle  
adjacent to the second seat-side or a side rail of the motor vehicle adjacent to the second  
20 seat-side, deflects and loosely guides the first and lap belt portion (1.1, 1.3) and the first  
shoulder belt portion (1.1);  
at least two latch plates (9, 11, 25), the first of which is a main latch plate (9), moveable  
along the lap- and shoulder -belt portion, and the second is an anti-submarining latch plate  
(11, 25), moveable along the lap belt portion; and  
25 anti-submarining buckle assemblies, attached to a seat frame of a seat, generally representing  
the seat-cushion frame or a seat-backrest frame;  
whereby  
a lower body-part of a body (96) of the passenger and an upper body-part (95) are restrained  
by the lap- and shoulder belt portion when the main latch plate (9) is plug-in connected to  
30 the main buckle assembly (9.1); and

the lap belt portion which is subdivided into two anti-submarining belt portions (1.3R, 1.3L) to restrain thighs of the passenger when the anti-submarining latch plate is plug-in connected to one of the anti-submarining buckle assemblies.

Claim 52. (currently amended) The multi-point seat belt anti-submarining seat-belt assembly to protect the passenger from submarining according to claim 1, further comprising wherein an anti-submarining latch plate (11, 25) movable along the lap belt portion (1.3) which is subdivided into two belt portions (1.3R, 1.3L) to restrain thighs of the passenger when the anti-submarining latch plate is plug-in connected to one of anti-submarining buckle assemblies (7, 8, 8a), housings of which, are located in at the seat cushion (3.1, 3.1a to 3.1d), have a mutual common release button (84o) on the seat where the common release button, when depressed, releases the anti-submarining latch plate.

Claim 53. (currently amended) The multi-point seat belt anti-submarining seat-belt assembly to protect the passenger from submarining according to claim 1, further comprising wherein an anti-submarining latch plate (11, 25) movable along the lap belt portion (1.3) which is subdivided into two belt portions (1.3R, 1.3L) to restrain thighs of the passenger when the anti-submarining latch plate is plug-in connected to one of anti-submarining buckle assemblies assembly (7, 8, 8a8d), housing of which, is located in on at the seat cushion (3.1, 3.1a to 3.1d), have is provided with a mutual release button (84do) on the seat, which, when depressed, releases the anti-submarining latch plate.

Claim 414. (currently amended) The multi-point seat belt anti-submarining seat-belt assembly according to claim 402, wherein the master release button (84) is provided with release cables (4.2) connecting to release buttons of the anti-submarining buckle assemblies and a release wire connected to the drive apparatus where the master release button, when depressed, releases the main latch plate and the anti-submarining latch plate from the respective buckle assemblies and returns the belt feeding device to the resting position.

Claim 415. (currently amended) The multi-point seat belt anti-submarining seat-belt assembly according to claim 403, wherein the master release button (84) is provided with release cables (4.2) connecting to release buttons of the anti-submarining buckle assemblies and a release wire connected to the drive apparatus where the master release button, when depressed, releases the main latch plate and the anti-submarining latch plate from the respective buckle assemblies and returns the belt feeding device to the resting position.

Claim ~~186~~. (currently amended) The ~~multi-point seat belt anti-submarining seat-belt assembly~~ according to claim ~~142~~, wherein the master release button (84) is provided with release wires connected to electrical release-motors (4.2b) of release buttons of the ~~anti-submarining~~ buckle assemblies ~~and a release wire connected to the drive apparatus~~ where the master release button, when depressed, releases the main latch plate and the anti-submarining latch plate ~~all the latch plates~~ from the respective buckle assemblies ~~and returns the belt-feeding device to the resting position.~~

Claim ~~187~~. (currently amended) The ~~multi-point seat belt anti-submarining seat-belt assembly~~ according to claim ~~143~~, wherein the master release button (84) is provided with release wires connected to electrical release-motors (4.2b) of release buttons of the ~~anti-submarining~~ buckle assemblies ~~and a release wire connected to the drive apparatus~~ where the master release button, when depressed, releases the main latch plate and the anti-submarining latch plate ~~all the latch plates~~ from the respective buckle assemblies ~~and returns the belt-feeding device to the resting position.~~

Claim ~~438~~. (currently amended) The ~~multi-point seat belt anti-submarining seat-belt assembly~~ according to claim ~~1~~, wherein the supplement anti-submarining latch plate is a belt-detachable latch plate (25), having a quick-release pin (25.1) and a U-shaped portion to house the lap belt portion which is secured therein by the quick-release pin and detached therefrom by pulling it.

Claim ~~9~~. (new) The anti-submarining seat-belt assembly according to claim 8, wherein the anti-submarining belt portions are provided with at least one pair of belt-detachable latch plates, which are plug-in connected to the anti-submarining buckle assemblies in the seat cushion at the first and second seat-side to properly restrain the thighs with small circumference.

Claim ~~4110~~. (currently amended) The ~~multi-point seat belt anti-submarining seat-belt assembly~~ according to claim ~~409~~, wherein the master release button (84) is provided with release cables (4.2) connecting to release buttons of the anti-submarining buckle assemblies ~~and a release wire connected to the drive apparatus~~ where the master release button, when depressed, releases the main latch plate and all the anti-submarining latch plates from the respective buckle assemblies ~~and returns the belt-feeding device to the resting position.~~

Claim 11. (new) The anti-submarining seat-belt assembly according to claim 10, wherein the anti-submarining latch plates, when not being used, are stored and secured in a storage box (25.5) of the seat.

Claim ~~43~~12. (currently amended) The ~~multi-point seat belt~~anti-submarining seat-belt assembly according to claim 1, wherein the anti-submarining latch plates are belt-detachable latch plates (25), each having a quick-release pin (25.1) and a U-shaped portion to house the lap belt portion which is secured therein by the quick-release pin and detached therefrom by pulling it.

Claim 13. (new) The anti-submarining seat-belt assembly according to claim 12, wherein the anti-submarining latch plates, when not being used, are stored and secured in a storage box (25.5) of the seat.

Claim ~~39~~14. (currently amended) The ~~multi-point seat belt~~anti-submarining seat-belt assembly to protect the passenger from submarining according to claim ~~31~~1, wherein the free-moving anti-submarining latch plate (11, 25) is movable along the lap belt portion (1.3) which is subdivided into two belt portions (1.3R, 1.3L) to restrain thighs of the passenger when the anti-submarining latch plate is plug-in connected to one of anti-submarining buckle assemblies (8b, 8c), a housing of which is free-moving on the seat cushion, each of which is provided with a release button (84e, 84f) and a length-adjustable belt, and attached to a the seat frame cushion.

Claim 15. (new) The anti-submarining seat-belt assembly according to claim 14, wherein the free-moving anti-submarining buckle assembly is provided with an electrical release-motor (4.2b), which, when receiving an electrical signal emitted from the main buckle assembly resulting from depressing the main release button releasing the main latch plate, pulls the release button to release the anti-submarining latch plate.

Claim ~~26~~16. (currently amended) The ~~multi-point seat belt~~anti-submarining seat-belt assembly according to claim ~~24~~14, wherein the belt end (ER) of the first shoulder belt portion (1.1) length-adjustable belt is provided with a coupling fitting (1.2a, 1.2b) to receive energy absorbers.

Claim 17. (new) The multi-point seat belt anti-submarining seat-belt assembly according to claim 14, wherein the length-adjustable belt has a property of absorbing energy.

Claim 18. (new) The multi-point seat belt anti-submarining seat-belt assembly according to claim 16, wherein the length-adjustable belt has a property of absorbing energy.

Claim 2619. (currently amended) The multi-point seat belt anti-submarining seat-belt assembly according to claim 241, wherein the belt end (ER) of the first shoulder belt portion (1.1) anti-submarining buckle assembly is provided with a coupling fitting (1.2a, 1.2b) to receive energy absorbers.

Claim 520. (currently amended) The multi-point seat belt to protect the passenger from submarining according to claim 1, further comprising an anti-submarining latch plate (11, 25) movable along the lap belt portion (1.3) An anti-submarining seat-belt assembly for increasing survival chance of a passenger of a transport system in an accident or during in-flight turbulence, comprising

a two-point seat belt, which is a lap belt portion, a first end of which is fastened to a lower belt deflector (17) and a second is loosely attached to a main latch plate (9);  
a main buckle assembly (9.1), having a master release button (84) and attached to a stiff first transport-system member, generally representing a floor of the transport system adjacent to a first seat-side or a seat-cushion frame at the first seat-side or a mid-tunnel of a motor vehicle adjacent to the first seat-side;

the lower belt deflector (17), attached to a stiff second transport-system member, which generally representing the floor of the transport system adjacent to a second seat-side or the seat-cushion frame at the second seat-side or a post section of the motor vehicle adjacent to the second seat-side or a side rail of the motor vehicle adjacent to the second seat-side;

at least two latch plates (9, 11, 25), the first of which is the main latch plate (9) and the second is an anti-submarining latch plate (11, 25), moveable along the lap belt portion; and anti-submarining buckle assemblies, attached to a seat frame of a seat, generally representing the seat-cushion frame or a seat-backrest frame;

whereby

a lower body-part of a body (96) of the passenger is restrained by the lap belt portion when the main latch plate (9) is plug-in connected to the main buckle assembly (9.1); and the lap belt portion is subdivided into two anti-submarining belt portions (1.3R, 1.3L) to restrain thighs of the passenger when the anti-submarining latch plate is plug-in connected to the anti-submarining buckle assembly.